

REMARKS/ARGUMENTS

Reconsideration of this application, as amended, is respectfully requested. Claims 1 through 29 remain in the application. Claim 29 has been amended. The above amendments are supported by the Specification as filed. Accordingly, no new matter is added.

1. Response to § 102 Rejections

Claims 1-5, 8-14, 18-20, 22 and 24-26 are rejected under 35 U.S.C. 102(b) as allegedly being anticipated by Zhao et al. (U.S. Patent No. 6,189,482) hereinafter “Zhao.”

Zhao discusses a CVD apparatus that includes a support shaft 121 and ceramic liner sections 149 to provide protection from corrosion for heater wires 150 (Figure 6). Heater supply line 150 is attached to nickel rod 156 with crimp connection 157. Heater supply lines may be coiled inside of ceramic liner 149 to provide strain relief during assembly and high-temperature thermal cycling (Col. 28 Ln. 1-9). The standoff 147 and endcap 148 have passages formed therein to accommodate wiring in the shaft. C-ring clips 771, used with each electrode, are used to prevent the bottom electrodes from being pushed in or pulled out. The O-ring 773 seals the end of shaft 121 and lower standoff 147, and O-rings 775 (used with each electrode) provides seals between lower standoff 147 and endcap 148. Accordingly, the shaft (i.e., support shaft 121) may be gas-tight for introduction of a purge gas into the support shaft (Col. 27 Ln. 11-46).

Although Zhao discusses ceramic liner sections (sleeves) to provide the heater wires within protection from corrosion, Zhao does not disclose a base plate assembly adapted to support a sleeve within the chamber so as to provide a non-airtight junction at a first end of the sleeve where it contacts the electrically operated heating platform or a base plate assembly adapted to support a sleeve within the hollow interior of the pedestal and to provide a manifold for a purge gas to be provided to the hollow interior of the sleeve during wafer processing operations. As clearly shown in Figure 6 of Zhao, the ceramic liner section 149 is countersunk into plug 146 at the bottom and countersunk into plug 144, which is in contact with heater stub flange 139. In other words, the ceramic

liner section 149 does not describe the sleeve providing a non-airtight junction at a first end of the sleeve where it contacts the electrically operated heating platform, as recited in the present claims. Additionally, the c-clip 771 and o-ring 773 create a gas-tight environment for the support shaft 121 with respect to the ceramic liner section 149 that includes the conductive wire 150. Consequently, it would not be possible for Zhao to provide a sleeve within the hollow interior of the pedestal (support shaft) and to provide a manifold for a purge gas to be provided to the hollow interior of the sleeve during wafer processing operations, as recited in independent claims 1 and 24, respectively.

Figure 8 of Zhao merely illustrates an RF standoff rod 856 (not a sleeve) brazed into a heater assembly 833 and a thermocouple 870 (not a sleeve) countersunk into the heater assembly 833 within the ceramic support shaft 821 (pedestal). It does not, however, illustrate or disclose a base plate assembly adapted to support a sleeve within the chamber so as to provide a non-airtight junction at a first end of the sleeve where it contacts the electrically operated heating platform or a base plate assembly adapted to support a sleeve within the hollow interior of the pedestal and to provide a manifold for a purge gas to be provided to the hollow interior of the sleeve during wafer processing operations, as recited in independent claims 1 and 24, respectively.

Therefore, because Zhao does not teach, either expressly or inherently, every aspect of independent claims 1 and 24, these claims are not anticipated by the cited art.

As a dependent claim is deemed to include the limitations of a claim from which it depends, the arguments presented above also address the rejections against the dependent claims. Accordingly, the rejections against the dependent claims have been addressed, and withdrawal of these rejections is respectfully requested.

In light of the above, Applicant respectfully submits that the rejection under 35 U.S.C. § 102 has been overcome, and withdrawal of this rejection is therefore respectfully requested.

2. Response to § 103 Rejections

Claims 6-7, 15-17, 21-23 and 29 are rejected under 35 U.S.C 103(a) as being unpatentable over Zhao.

As discussed above with respect to Figures 6 and 8 of Zhao, it is clear from the figures and their accompanying description that Zhao does not disclose delivering a purge gas within a sleeve located in a pedestal, the sleeve surrounding an electrical conductor associated with an electrically operated heating assembly of a wafer processing chamber so that the purge gas envelopes the electrical conductor within the sleeve and escapes from an unsealed end thereof into the processing chamber to be pumped out with process gases. Conversely, Zhao discloses a c-clip 771 and o-ring 773 to create a gas-tight environment for the support shaft 121 with respect to the ceramic liner section 149 that includes the conductive wire 150. Therefore, independent claim 29 is patentable over the cited art.

As a dependent claim is deemed to include the limitations of a claim from which it depends, the arguments presented above with respect to 35 U.S.C. § 102 also address the rejections against the dependent claims rejected here under § 103. Accordingly, the rejections against the dependent claims have been addressed, and withdrawal of these rejections is respectfully requested.

In light of the above, Applicant respectfully submits that the rejection under 35 U.S.C. § 103 has been overcome, and withdrawal of this rejection is therefore respectfully requested.

3. Conclusion

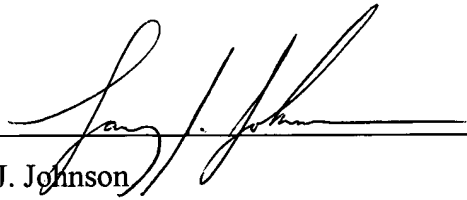
Having tendered the above remarks and amended the claims as indicated herein, Applicants respectfully submit that all rejections have been addressed and that the claims are now in a condition for allowance, which is earnestly solicited.

If there are any additional fees due in connection with this communication, please charge our deposit account no. 02-2666. If a telephone interview would in any way expedite the prosecution of the present application, the Examiner is invited to contact Larry J. Johnson at (408) 947-8200 ext. 208.

Respectfully submitted,

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